

# Work Order ID 51649

August 27, 2009 8:28:58 AM



Page 1

Item ID: D3417-5

Accept



Setup Start



Revision ID: E

Stop



Item Name: Washer

Start Date: 8/27/09 Start Qty: 160.00



Cust Item ID:

Required Date: 9/04/09 Req'd Qty: 160.00



Customer:

Reference:

Approvals: Process Plan: *RL*

Date: *09-8-27*

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
<b>Draw Nbr</b>	<b>Revision Nbr</b>								
D3417	Rev E								
100	Hardinge CNC LATHE SMALL	0.00							
	Doosan	0.00	<i>160</i>	<i>09/08/08</i>					<i>✓</i>
Doosan Lathe	Memo 1-Turn as per Folio FA761 Rev: <i>MA</i> & Dwg D3417 Rev: <i>A</i> 2-Deburr								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
	QC	0.00	<i>160</i>	<i>09/09/08</i>					<i>✓</i>
Quality Control	Memo								
120	QC8- Inspect parts - second check	0.00							
	QC	0.00	<i>160</i>	<i>H.A 09/09/09</i>					<i>✓</i>
Quality Control	Memo								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 51649

August 27, 2009 8:28:58 AM

Page 2

Item ID: D3417-5

Accept

Revision ID: E

Item Name: Washer

Start Date: 8/27/09

Start Qty: 160.00

Required Date: 9/04/09

Req'd Qty: 160.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

Identify as per dwg & Stock Location: \_\_\_\_\_

0.00



Packaging

Memo

0.00

Packaging

140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09/09/09 (160)

09/09/09

MF 09-09-09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

August 27, 2009 8:28:57 AM

Work Order ID: 51649

Parent Item: D3417-5RevE

Parent Item Name: Washer

Comments:

Start Date: 8/27/09

Required Date: 9/04/09

Start Qty: 160.00

Required Qty: 160.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MDELRRNR1.2500		Purchased	No			110	f	29.3200	4.9853			



DELRIN ROUND BAR 1.25"

Warehouse  
Location

Loc Qty

Loc Code

Main Warehouse

MAT

29.32

110256

29.32

30 in  
18 in  
36 in

727 8/27/09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

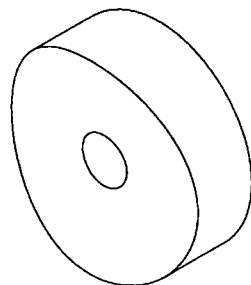
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

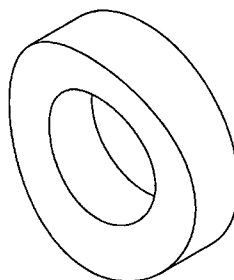
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

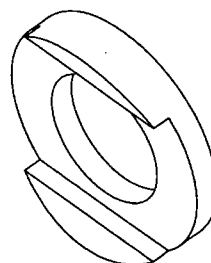




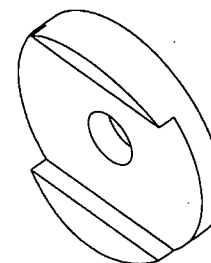
**D3417-1 WASHER**



**D3417-3 WASHER**



**D3417-5 WASHER**  $\triangle$



**D3417-7 WASHER**  $\triangle$

**RELEASED**  
06/15/02

51649

**NOTES:**

- 1) MATERIAL: BLACK DELRIN II 150E OR ACETRON GP ACETAL, ROD  
REF DART SPEC M-DELRIN-R  
OR BLACK DELRIN II 150E OR ACETRON GP ACETAL, BAR  
REF DART SPEC M-DELRIN-B  
OR BLACK DELRIN II 150E OR ACETRON GP ACETAL, SHEET  
REF DART SPEC M-DELRIN-S

2) FINISH: NONE

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

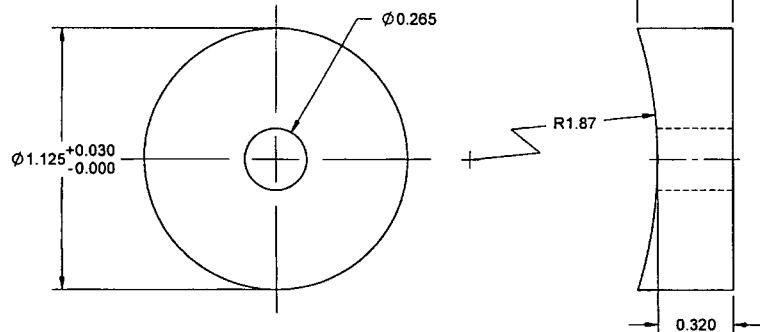
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: N/A

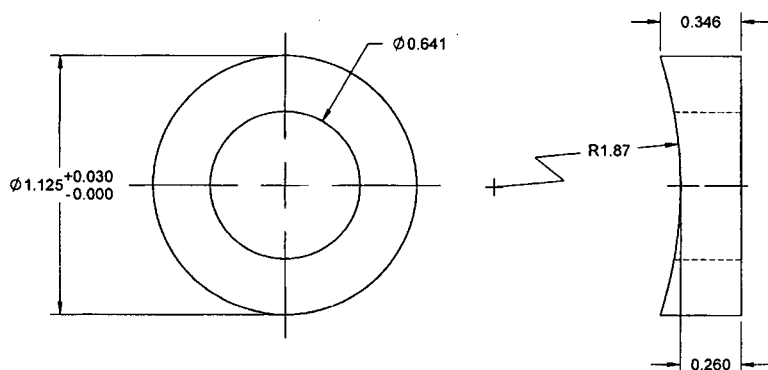
7) WEIGHT: D3417-1, 0.02 lbs  
D3417-3, 0.01 lbs  
D3417-5, 0.01 lbs  
D3417-7, 0.01 lbs

E	ADD D3417-7 (ZN A2-2)	RF	09.06.30
D	ADD -5 WASHER (ZN B2-1, B2-2); REFORMAT TO "B" SIZE & UPDATE TO CURRENT STANDARDS; REASON: INSTALLATION OF NEW TOW RING	AJS	08.07.08
C	REMOVE CBORE, WIDEN	PH	05.06.30
B	CHANGE TO ROUND WASHER	PH	05.06.10
A	NEW ISSUE	PH	05.03.31
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. D
MFG. APPR.	RF	D3417	SHEET 1 OF 2
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	WASHER	NTS
DATE	09.06.30	COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE SUPPLIED COPIES THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

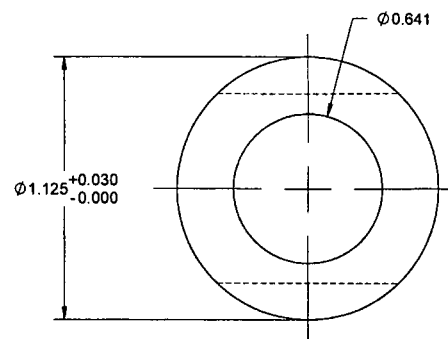




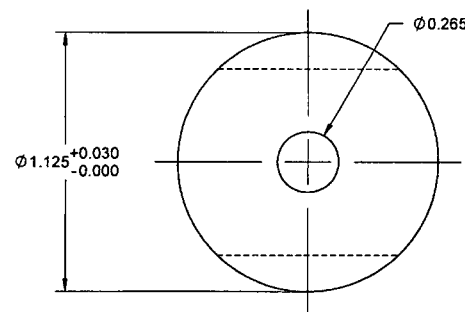
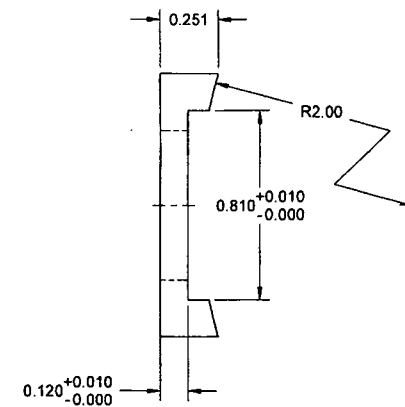
**D3417-1 WASHER**



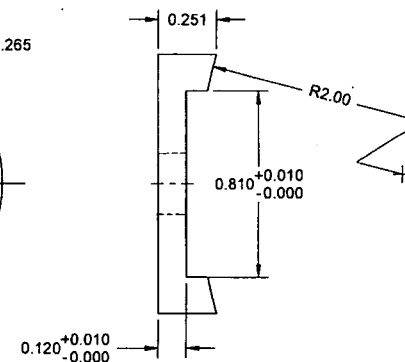
**D3417-3 WASHER**



**D3417-5 WASHER**



**D3417-7 WASHER**



51649

**RELEASED**  
2015/11/15

DESIGN	AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		<b>D3417</b>	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		<b>WASHER</b>	NTS
DATE	09.06.30	<small>COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRINTED AND COMMERCIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	